

Abstract

Operators and plant computer programs used to
operate a complex process facility are aided in
managing the process during transitions by a computer-
based apparatus. The apparatus incorporates a
knowledge base and methods for identifying modes and
transitions during plant operation. At frequent
intervals, measured values of the process variables
are used to evaluate the current state of the process
and its sections and subsections. The identified
state of the plant is broadcast to different clients
of this application. The apparatus monitors the plant
for the normal execution of the transition. It also
identifies the current task being performed in the
process and sends this message to different sections
of the plant. The results are displayed on a visual
display device and can also be sent to other plant
computer programs for guidance during the transition.
A permanent chronological record of the sequence of
events - modes and transitions - of the plant and
sections and subsections including the pertinent plant

